FORM MR-LMO (Revised 2/88)

FOR DIVISION USE ONLY

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Date Approved: DOGM Lead:

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DIVISION OF OIL, GAS & MINING

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

Telephone: (801) 538-5340

# NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

The informational requirements in this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, General Rules and Rules of Practice and Procedures.

This form applies only to mining operations which disturb or will disturb greater than five acres at any given time.

"MINING OPERATIONS" means those activities conducted on the surface of the land for the exploration for, development of, or extraction of a mineral deposit, including, but not limited to, surface mining and the surface effects of underground and in situ mining, on-site transportation, concentrating, milling, evaporation, and other primary processing.

"Mining operation" does not include: the extraction of sand, gravel, and rock aggregate; the extraction of oil and gas as defined in Chapter 6, Title 40; the extraction of geothermal steam; smelting or refining operations; off-site operations and transportation; or reconnaissance activities which will not cause significant surface resource disturbance or involve the use of mechanized earth-moving equipment such as bulldozers or backhoes:

PLEASE NOTE: If extra space is required to complete a section, please attach additional sheets and include cross-referenced page numbers as necessary. The operator may submit this information on an alternate form, however the same or similar format must be used.

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I.

Mine Name: Redmond Clay & Salt Co. Mines
Name of Applicant or Company: Redmond Clay + Salt Co. M. Corporation () Partnership () Individual ()
Permanent Address: Redmond, Utsh
Company Representative (or designated operator): Name: Title: Address: Phone:
Location of Operation:  County(ies) Sempete & Sevier  Township: 20.5. Range: / W. Section: 13.14,13,14 +15  Township: Range: Section:  Township: Range: Section:
Ownership of the land surface: (Private) (Fee), Public Domain (BLM), National Forest (USFS), State of Utah or other:
Name: Redmond Clay + S2Tt Address: Redmond, Utch Name: Address: Name: Address: Address:
Owner(s) of record of the minerals to be mined:
Name: Address: Address: Name: Address:
Have the above owners been notified in writing? Yes No  If no, why not? Private Property



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## II. MAPS, DRAWINGS & PHOTOGRAPHS (Rule R613-004-105)

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#### 1. Base Map

A complete and correct topographic base map (or maps) with appropriate contour intervals must be submitted with this notice which show all of the items on the following checklist. The scale should be approximately 1 inch = 2,000 feet (preferably a USGS 7.5 minute series or equivalent topographic map where available) showing the location of lands to be affected in sufficient detail to permit calculation of proposed surface disturbance.

#### Map Checklist

Please check off each section as it is drawn on the map(s). Does the map show:

(a) Property boundaries of surface ownership of all lands which are to be affected by the mining operations;

(b) Perennial streams, springs and other bodies of water, roads, buildings, landing strips, electrical transmission lines, water wells, oil and gas pipelines, existing wells or boreholes, or other existing surface or subsurface facilities within 500 feet of the proposed mining operations;

(c) Proposed route of access to the mining operations from nearest publicly maintained highway (Map scale appropriate to show access):

(d) Known areas which have been previously impacted by mining or exploration activities within the proposed land affected;

(e) Acreages proposed to be disturbed or reclaimed each year (or other suitable time period. (In Blue)

Power Lines

See Map

one

# 2. Surface Facilities Map

A surface facilities map shall be provided at a scale of not less than l'' = 500'.

#### Map Checklist

Please check off each section as it is drawn on the map. Does the map show:

(a) Proposed surface facilities, including but not limited to buildings, stationary mining/processing equipment, roads, utilities, power lines, proposed drainage control structures, and the location of topsoil storage areas, overburden/waste dumps, tailings or processed waste facilities, disposal areas for overburden, solid and liquid wastes, and wastewater discharge, treatment and containment facilities;

See Map

	(b)	A border clearly outlining the extent of the surface disturbed area proposed to be affected by mining, and the number of acres proposed to be affected;
	(c)	The location of known test borings, pits, or core holes.
	3.	Additional Maps
	Add wit	itional maps and drawings may be required as applicable in accordance h Rule R613-004-105.3.
III.	OPE	RATION PLAN (Rule R613-004-106)
	1.	Mineral(s) to be mined: 52/t & Bentonite.
	2.	Acreage to be disturbed:
		Minesite (operating, storage, disposal areas, etc.):  Access/haul roads/conveyors:  Associated on-site processing facilities:  Total:  5  Total:
	3.	Describe methods and procedures to be employed for mining, on-site processing and concurrent reclamation.
		Salt - under ground - Blasting + Loading.  Crushing - Drying - Sereening.  Clay - Over burden removal - Open Pit Loading  Pad drying - Crushing - Screening - grinding.
	4.	Elevation of groundwater (if known) ft.
	5.	Thickness of soil material to be stockpiled.  Area from which soil material can be salvaged  Volume of soil to be stockpiled  (cross reference with item IV-17)  inches acres cu. yds.
	6.	Thickness of overburden
	7.	Thickness of mineral deposit.
	8.	Volume of refuse, tailings, and processing waste stockpiles.  Un Known (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
	9.	Acreage and capacity of tailings ponds and water storage ponds to be constructed.
		Acre-FeBt/ISION OF OIL, GAS & MINING

	protected. None
Desc	ribe how overburden material will be removed and stockpiled.  Pushed to side With Bulldozer
esc lisp	cribe how tailings, waste rock, rejected materials, etc. will be bosed of. Heyled to dump area
<i>lesc</i>	entially deleterious materials must be analyzed for toxicity.  Tribe the nature of any deleterious materials which will be used, buntered, or generated onsite (See Rule R613-001-004).
pec	ify analyses to be conducted on these materials.
IOTE	: The Division may stipulate additional analyses.
J no.	each tailings pond, sediment pond, or other major drainage rol structures, attach design drawings and typical s-sections.
he	ribe any proposed effluent discharge points (UPDES) and show r location on the map provided under Rule R613-004-105.2. Give proposed discharge rate and expected water quality. Attach ical analyses of such discharge if available
ona	tation - The operator is required to return the land to a useful ition and reestablish at least 70 percent of the premining tation ground cover. Private Property
ver	ground cover percentage figure is determined by sampling and aging the vegetation type(s) on the areas to be mined (see chment I for suggested sampling methods).
a)	<u>Vegetation Survey</u> - The following information needs to be completed based upon the vegetation survey:
	Sampling method used
	A company bank bank bank

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	Ground Cover		Percent
	Vegetation (perennial gras forb and shrub cover)	s,	20
	Litter		20
	Rock/rock fragments		10
	Bare ground		100%
	Revegetation Requirement - of above vegetation figure	70 percent	<u> </u>
on t	the four (4) predominant p he area. UNC 97255	erennial species  Russian	
	Sage Brush	Will.	0019.

(b) Photographs - The operator may submit photographs (prints) of the site sufficient to show existing vegetation conditions. These photographs should show the general appearance and condition of the area to be affected and may be utilized for comparison upon reclamation of the site. Photographs should be clearly marked as to the location, orientation and the date that the pictures were taken.

wweeds.

- 17. Soils The plan shall include an order 3 Soil Survey (or similar) and map. This information is needed to determine which soils are suitable for stockpiling for revegetation. This soil data may be available from the local Soil Conservation Service office, or if on public lands, from the land management agency. The map needs to be of such scale that soil types can be accurately determined on the ground (see Attachment I).
  - (a) Each soil type to be disturbed needs to be field analyzed for the following:

Depth of soil material inches Volume (for stockpiling) cu. yds. Texture (field determination) pH (field determination) (cross reference with item IV - 5)

Where there are problem soil areas (as determined from the field examination) laboratory analysis may be necessary. Soil samples to be sent to the laboratory for analysis need to be about one pint in size, properly labeled, and in plastic bags. Each of the soil horizons on some sites may need to be sampled.

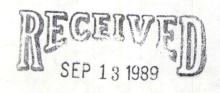


Plea surf	CT ASSESSMENT (Rule R613-0Q4-109)
surf	
spec recl	se provide a general narrative description identifying potential ace and/or subsurface impacts. Where applicable, this description ld include surface and groundwater systems, threatened or endangered ies or their critical habitats, existing soil resources for amation, slope stability, erosion control, air quality, and public th and safety.
RECL	AMATION PLAN (Rule R613-004-110)
	List current land use(s) other than mining:
	Erst current rand use(s) Other than mining.
2.	List future post-reclamation land-use(s) proposed: Wone
3.	Describe each phase of reclamation of the minesite in detail under the following categories:
	(a) <u>Disposal of Trash</u> Describe how buildings, foundations, trash and other waste materials will be disposed of.
	None
	(b) <u>Backfilling and Grading</u> Describe equipment and methods to be employed, amount of materials to be moved and final disposition of any stockpiled materials.
	None



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In order to reestablish the required ground cover, one to two feet (depending on underlying material) of suitable soil material usually has to be redistributed on the areas to be reseeded. If the stockpiled soil isn't sufficient for this, soil borrow areas will need to be located.
How much soil material is planned to be put on the area to be reseeded? inches
Where will this material come from? Pile Next to Pit
How will it be transported and spread? fushed in with
(d) Seed Bed Preparation
Describe how the seedbed will be prepared and equipment to be used
(The Division and displaced displaced decay)
(The Division recommends ripping or discing six inches deep)
(e) <u>Seed Mixture</u> - List the species to be seeded:
Seeding Rate
Species Name (1bs Pure Live Seed/Acre)
Crested wheat 20 168.
(The Division recommends seeding 20 lbs./acre of native and introduced adaptable species of grass, forb, and browse seed and will provide a specific species list if requested)
(f) Seeding Method  Describe method of planting the seed. Grain drill  Or Hand broadcast.
(The Division recommends planting the seed with a rangeland or farm drill, or if broadcast seeded, harrow or rake the seed 1/4 to 1/2 inch into the soil. Fall is the preferred time to seed)

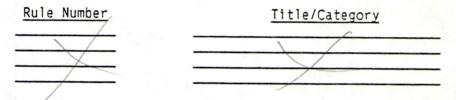


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Describe fertilization method and r	rate. Not Needed
(h) Other Revegetation Procedures If other reclamation procedures, su are planned, describe them.	uch as mulching, irrigation, etc.
and prainted, describe them.	

## VI. <u>VARIANCE</u> (Rule R613-004-112)

Any planned deviations from Rule R613-004-007 (Operating Practices), R613-004-108 (Hole Plugging Requirements), or Rule R613-004-111 (Reclamation Practices) must be identified below.



For each variance requested, attach a narrative statement describing and delineating the area proposed to be affected by the variance, justifying the need for the variance, and discussing alternate methods or measures to be utilized.

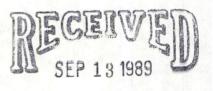
## VII. SURETY (Rule R613-004-113)

A Reclamation surety must be provided to the Division prior to final approval of this application. In calculating this amount, the Division will consider the following major steps:

- 1) Clean-up and removal of structures.
- 2) Backfilling, grading and contouring.
- 3) Soil material redistribution and stabilization.
- 4) Revegetation (preparation, seeding, mulching)

To assist the Division in determining a reasonable surety amount, please attach a reclamation cost estimate which addresses each of the above steps.

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## VIII. SIGNATURE REQUIREMENT

I hereby certify that the foregoi	ng is true and correct.
Signature of Operator/Applicant:	Milo d. Bosshardt
Name (typed or print):	Milo J. Bosshardt
Title/Position (if applicable):	Operator
Date:	9-9-89

## PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps. Only information relating to the <u>location</u>, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: ( ) Yes ( ) No

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